

The resulting double-stranded DNA was diluted 1:50 and amplified using primers SpeI.24 (TTA TAC TAG TAA TCT ATC TAA ACG (SEQ ID NO:17); 0.4 μ M) and EcoRI.24 (CCC GGA ATT CTA TCC AGC TGC ATG (SEQ ID NO:18); 0.4 μ M) in PCR buffer (10 mM Tris-HCl, pH 8.3, 50 mM KCl, 1.5 mM MgCl₂, 0.1% Triton X-100, 0.005% gelatin), dNTPs (200 μ M) and Taq DNA polymerase (Promega, Madison, WI; 1.5 units). The reactions were thermocycled 15 times at 94° C for 30 seconds, 45° C for 30 seconds, 72° C for 1 minute and then purified with a QIAquick PCR purification kit (Qiagen, Valencia, CA).--

On page 70, delete paragraph [00213], of the above-captioned Specification and insert the following:

--[00213] The PCR product was digested with SpeI (New England Biolabs, Beverly, MA; 20 units) and EcoRI (50 units) in buffer (50 mM NaCl, 100 mM Tris-HCl, pH 7.5, 10 mM MgCl₂, 0.025% Triton X-100, 100 μ g/ml BSA) at 37° C for 60 minutes, purified, and cloned into SpeI/EcoRI digested pTZtd1304. The negative control and nucleic acid constructs were made as described except that Gp1 Wt3.129 was replaced with oligonucleotides of the appropriate sequence: B11 GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCT AAA TGC CTA ACG ACT ATC CCT T (SEQ ID NO:19).--

On page 70, delete paragraph [00214], of the above-captioned Specification and insert the following:

--[00214] Th1P6 GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCT AAA TTA TAC CAG CAT CGT CTT GAT GCC CTT GGC AGA TAA ATG CCT AAC GAC TAT CCC TT (SEQ ID NO:20).--

On page 70, delete paragraph [00215], of the above-captioned Specification and insert the following:

--[00215] Th2P6 GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCT AAA TTG ATA CCA GCA TCG TCT TGA TGC CCT TGG CAG CAT AAA TGC CTA ACG ACT ATC CCT T (SEQ ID NO:21).--

On page 70, delete, paragraph [00216], of the above-captioned Specification and insert the following:

--[00216] Th3P6 GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCA TAC CAG CAT CGT CTT GAT GCC CTT GGC AGG CCT AAC GAC TAT CCC TT (SEQ ID NO:22).--

On page 70, delete paragraph [00217] that extends to page 71, of the above-captioned Specification and insert the following:

--[00217] Th4P6 GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA
ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCT AAA TAT ACC AGC ATC GTC
TTG ATG CCC TTG GCA GTA AAT GCC TAA CGA CTA TCC CTT (SEQ ID NO:23),--

On page 71, delete paragraph [00218], of the above-captioned Specification and insert the following:

--[00218] Th5P6 GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA
ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT ATA CCA GCA TCG TCT TGA TGC
CCT TGG CAG CTA ACG ACT ATC CCT T (SEQ ID NO:24),--

On page 71, delete paragraph [00219], of the above-captioned Specification and insert the following:

--[00219] Th6P6 GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC TAA
ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GAT ACC AGC ATC GTC TTG ATG
CCC TTG GCA GCC TAA CGA CTA TCC CTT (SEQ ID NO:25),--

On page 71, delete paragraph [00220], of the above-captioned Specification and insert the following:

--[00220] Th1P5 TGA GTA TAA GGT GAC TTA TAC TAG TAA TCT ATC TAA ACG
GGG AAC CTC TAT ACC AGC ATC GTC TTG ATG CCC TTG GCA GAG ACA ATC CCG
TGC TAA ATT GTA GGA CTG CCC GGG TTC TAC ATA AAT GCC TAA CGA CTA TCC
CTT (SEQ ID NO:26),--

On page 71, delete paragraph [00221], of the above-captioned Specification and insert the following:

--[00221] Th2P5 TGA GTA TAA GGT GAC TTA TAC TAG TAA TCT ATC TAA ACG
GGG AAC CTA TAC CAG CAT CGT CTT GAT GCC CTT GGC AGA CAA TCC CGT GCT
AAA TTG TAG GAC TGC CCG GGT TCT ACA TAA ATG CCT AAC GAC TAT CCC TT
(SEQ ID NO:27),--

On page 71, delete paragraph [00222], of the above-captioned Specification and insert the following:

--[00222] 3Mex2P6 GTA ATC TAT CTA AAC GGG GAA CCT CTC TAG TAG ACA
ATC CCG TGC TAA ATT GAT ACC AGC ATC GTC TTG ATG CCA TTG GCA GCA TAA
ATG CCT AAC GAC TAT CCC TT (SEQ ID NO:28),--

On page 71, delete paragraph [00223], of the above-captioned Specification and insert the following:

--[00223] Th2P6.D GTA ATC TAT CTA AAC GGG GAA CCT CTC TAG TAG ACA
ATC CCG TGC TAA ATT GAT ACC AGC ATC GTC TTG ATG CCC TTG GTT GCA TAA
ATG CCT AAC GAC TAT CCC TT (SEQ ID NO:29),--

On page 71, delete paragraph [00224], of the above-captioned Specification and insert the following:

--[00224] FMN1P6 GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC
TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCT AAA TTA GGA TAT GCT
TCG GCA GAA GGA TAA ATG CCT AAC GAC TAT CCC TT (SEQ ID NO:30), and

On page 72, delete paragraph [00225], of the above-captioned Specification and insert the following:

--[00225] FMN2P6 GCC TGA GTA TAA GGT GAC TTA TAC TTG TAA TCT ATC
TAA ACG GGG AAC CTC TCT AGT AGA CAA TCC CGT GCT AAA TTG AGG ATA TGC
TTC GGC AGA AGG CAT AAA TGC CTA ACG ACT ATC CCT T (SEQ ID NO:31).

On page 72, delete paragraph [00226], of the above-captioned Specification and insert the following:

--[00226] In vitro transcription. The introns were PCR-amplified with 5' le (GAT AAT ACG ACT CAC TAT AAT GGC ATT ACC GCC TTG T) (SEQ ID NO:32) and GM24 (GCT CTA GAC TTA GCT ACA ATA TGA AC) (SEQ ID NO:33) in 25 µl reactions under the conditions stated above and cycled 20 times. A portion of the reaction (5 µl) was run on a 3% agarose gel and the PCR product band was stabbed with a pipette tip. The agarose plug was added to a fresh PCR reaction (100 µl) and cycled 15 times; DNA was purified using a QIAquick kit and quantitated. The PCR product (2 µg in 50 µl) was added to an *in vitro* transcription reaction containing Ampliscribe T7 RNA polymerase (Epicentre), RNase inhibitor (GIBCO BRL, Rockville, MD; 5 units), low Mg²⁺ buffer (30 mM Tris-HCl, pH 8, 7.5 mM DTT, 4.5 mM MgCl₂, 1.5 mM spermidine), UTP (1.25 mM), ATP (2.5 mM), GTP (2.5 mM), CTP (7.5 mM) and αP₃₂-labeled UTP (NEN, Boston, MA; 20 µCi; 3000 mCi/mmol), and incubated at 37° C for 2 hours. DNase (GIBCO BRL, 295 units) was added and the reaction was incubated at 37° C for an additional 30 minutes. The RNA was purified using Centri-Sep columns (Princeton Separations, Adelphia, NJ) and quantitated.

On page 77, delete paragraph [00248], of the above-captioned Specification and insert the following:

--[00248] Aptazyme Array and Titration of Individual Aptazymes. Arrayed aptazyme assay were carried out by first annealing 100 pmol of ribozyme with 120 pmol of 18.90A (5'